IN THE CLAIMS:

1. (Currently Amended) A low Co hydrogen storage alloy having a $CaCu_5$ ~~-type~~ crystal structure that can be represented by the general formula $MmNi_aMn_bAl_cCo_d$, wherein Mm is a Misch metal, [[4.0]] 4.31 $\leq a \leq 4.7$, $0.3 \leq b \leq 0.65$, $0.2 \leq c \leq 0.5$, $0 < d \leq 0.35$, $5.2 \leq a + b + c + d \leq 5.5$, wherein the a-axis length of the crystal lattice of said $CaCu_5$ ~~-type~~ crystal structure is 499 pm or more, and the c-axis length is 405 pm or more.

2. (Original) The low Co hydrogen storage alloy according to claim 1, wherein, in a composition of $5.25 \leq a + b + c + d < 5.30$, the a-axis length of the crystal lattice is not less than 500.5 pm and not more than 502.7 pm, and the c-axis length is not less than 405.6 pm and not more than 406.9 pm.

3. (Original) The low Co hydrogen storage alloy according to claim 1, wherein, in a composition of $5.30 \leq a + b + c + d < 5.35$, the a-axis length of the crystal lattice is not less than 500.0 pm and not more than 502.4 pm, and the c-axis length is not less than 405.9 pm and not more than 407.2 pm.

4. (Original) The low Co hydrogen storage alloy according to claim 1, wherein, in a composition of $5.35 \leq a + b + c + d < 5.40$, the a-axis length of the crystal lattice is not less than 499.8 pm and not more than 502.3 pm, and the c-axis length is not less than 406.0 pm and not more than 407.3 pm.

5. (Original) The low Co hydrogen storage alloy according to claim 1, wherein, in a composition of $5.40 \leq a + b + c + d < 5.45$, the a-axis length of the crystal lattice is not less than 499.7 pm and not more than 502.3 pm, and the c-axis length is not less than 406.1 pm and not more than 407.4 pm.

6. (Withdrawn) A low Co hydrogen storage alloy having a $CaCu_5$-type crystal structure that can be represented by the general formula $MmNi_aMn_bAl_cCo_dFe_e$, wherein Mm is a Misch metal, $4.0 \leq a \leq 4.7$, $0.3 \leq b \leq 0.65$, $0.2 \leq c \leq 0.5$, $0 < d \leq 0.35$, $0 < e \leq 0.11$, $5.2 \leq a + b + c + d + e \leq 5.5$, wherein the a-axis length of the crystal lattice of said $CaCu_5$-type crystal structure is 499 pm or more, and the c-axis length is 405 pm or more.

7. (Withdrawn) The low Co hydrogen storage alloy according to claim 6, wherein, in a composition of $5.25 \leq a + b + c + d + e < 5.30$, the a-axis length of the crystal lattice is not less than 500.5 pm and not more than 502.7 pm, and the c-axis length is not less than 406.6 pm and not more than 407.9 pm.

8. (Withdrawn) The low Co hydrogen storage alloy according to claim 6, wherein, in a composition of $5.30 \leq a + b + c + d + e < 5.35$, the a-axis length of the crystal lattice is not less than 500.0 pm and not more than 502.4 pm, and the c-axis length is not less than 406.9 pm and not more than 408.2 pm.

9. (Withdrawn) The low Co hydrogen storage alloy according to claim 6, wherein, in a composition of $5.35 \leq a + b + c + d + e < 5.40$, the a-axis length of the crystal lattice is not less than 499.8 pm and not more than 502.3 pm, and the c-axis length is not less than 407.0 pm to 408.3 pm.

10. (Withdrawn) The low Co hydrogen storage alloy according to claim 6, wherein, in a composition of $5.40 \leq a + b + c + d + e < 5.45$, the a-axis length of the crystal lattice is not less than 499.7 pm and not more than 502.3 pm, and the c-axis length is not less than 407.1 pm and not more than 408.4 pm.

11. (Previously Presented) The low Co hydrogen storage alloy according to claim 1, wherein the pulverization residual rate obtained by the following equation is 50% or more:

Pulverization residual rate (%) = (post-cycling particle size/pre-cycling particle size) × 100,

when a hydrogen storage alloy is ground and screened to select particles with a particle size in the range of 20 μm and 53 μm to provide hydrogen storage alloy powder, and after measuring with a particle size distribution measuring device the average particle size (pre-cycling particle size, D_{50}) of the hydrogen storage alloy powder; 2 g of the hydrogen storage alloy powder is weighed and placed into a PCT holder; the surfaces thereof are cleaned twice under hydrogen pressure of 1.75 MPa; then activation is carried out twice by introducing hydrogen of 3 MPa;

next, a cycle test using a PCT device is then repeated 50 times, wherein hydrogen gas of 3 MPa is introduced into 2.0 g of the hydrogen storage alloy powder to absorb hydrogen, and the hydrogen is desorbed at 45°C; and the average particle size of the hydrogen storage alloy powder after the test of the 50 cycles (post-cycling particle size, D_{50}) is measured with a particle size distribution measuring device.

12. (Withdrawn) The low Co hydrogen storage alloy according to claim 6, wherein the pulverization residual rate obtained by the following equation is 50% or more:

Pulverization residual rate (%) = (post-cycling particle size/pre-cycling particle size) × 100,

when a hydrogen storage alloy is ground and screened to select particles with a particle size in the range of 20 μm and 53 μm to provide hydrogen storage alloy powder, and after measuring with a particle size distribution measuring device the average particle size (pre-cycling particle size, D_{50}) of the hydrogen storage alloy powder; 2 g of the hydrogen storage alloy powder is weighed and placed into a PCT holder; the surfaces thereof are cleaned twice under hydrogen pressure of 1.75 MPa; then activation is carried out twice by introducing hydrogen of 3 MPa; next, a cycle test using a PCT device is then repeated 50 times, wherein hydrogen gas of 3 MPa is introduced into 2.0 g of the hydrogen storage alloy powder to absorb hydrogen, and the hydrogen is desorbed at 45°C; and the average particle size of the hydrogen storage alloy powder after the test of the 50 cycles (post-cycling particle size, D_{50}) is measured with a particle size distribution measuring device.

13. (Previously Presented) A cell having a configuration comprising a low Co hydrogen storage alloy according to claim 1 as a negative-electrode active material.

14. (Withdrawn) A cell having a configuration comprising the low Co hydrogen storage alloy according to claim 6 as a negative-electrode active material.

15. (Previously Presented) A cell having a configuration comprising the low Co hydrogen storage alloy according to claim 11 as a negative-electrode active material.

16. (Withdrawn) A cell having a configuration comprising the low Co hydrogen storage alloy according to claim 12 as a negative-electrode active material.